

The following are his conclusions:—

"1. That penetrating wounds of the heart give rise to a perceptible sound, similar to that heard in varicose aneurism.

"2. That they are accompanied with a *constant convulsive action* of the muscular fibres of the heart.

"3. That the sound just indicated ceases as soon as the wound is closed by a coagulum.

"4. That the convulsive action of the muscular fibres of the heart continue after the formation of the coagulum.

"5. That patients often die from a compression of the heart, and the formation of coagula in the interior of that organ.

"6. That the proper treatment consists, in the first place, of diminishing the mass of blood, even to syncope, with a view of lessening the action of the heart and favouring the formation of a coagulum."

There seems to us, we may remark, some discrepancy between his last two conclusions.

MIDWIFERY.

54. *Delivery of o Fetus with the Secundines, the Membranes Unbroken.*—Dr. VICTOR SZOKALSKI, in a communication in *La Lançette Française*, (March 28, 1839,) states that two days previously he had been called to a woman who had been suddenly delivered in the street. On the Doctor's arrival he found the mother seated in a chair. She was a robust woman, about 35 years of age. A glance sufficed to assure him there was no need of anxiety on her account and he directed his attention to *something* which a neighbour held enveloped in her apron; this was an infant, enclosed in its membranes, yet unbroken, motionless and exhibiting no signs of life. It had been born whilst the mother was walking, and had fallen on the pavement. Not being able to tear the membranes, they were so tough, with his fingers, he opened them promptly with a pair of scissors; when about six ounces of liquor amnii flowed out. The infant, a boy, seemed almost, at term, but feeble and emaciated. The umbilical cord was without pulsation; however, some beating of the heart was perceptible. Inspired with hope by this circumstance, Dr. S. cleared promptly the mouth of the infant, and applied frictions with flannel to the chest; he then washed every part of it with warm water, and in a few minutes had the pleasure to see the infant breathe. On the head of the infant, near the anterior margin of the frontal fontanelle, there was a small recent wound, which seemed to attest the fact of the child having fallen on its head, when ushered into the world.

The mother stated that this child was her tenth, and that she had always been delivered with extreme facility. This time she had advanced to the period of eight and a half months, and she attributed her premature delivery to a fall she had had a few days previously in the street. Labour pains had commenced the preceding morning, and as they increased towards evening, she went to the Hotel Dieu, but being refused admittance, she hastened towards the Clinical Hospital of the faculty, and on the way she dropt her burden.

55. *New test for the detection of Pregnancy.*—Some years ago M. NAUCHE communicated to the Society of Practical Medicine of Paris, a memoir in which he endeavoured to show that the urine in pregnant women contains a peculiar substance, which separates by repose and forms a pellicle on its surface, and to which he gave the name of *kiesteine*, and that thus a valuable diagnostic sign may be derived by the obstetrical physician. But little importance has hitherto been attached to this alleged discovery of M. Nauche; and we are not aware of any accurate series of experiments which have been instituted with the view of determining the question, till M. Tanchou, of Paris, recently published his researches on the subject in the *Lançette Française*. (February 21, 1839.)

He examined the urine of twenty-five pregnant women, and in every case he detected the presence of *kieselstein*. The following is the description he gives of the changes which the urine during pregnancy exhibits, and of the characters by which its peculiar ingredient may be recognized.

The urine of a pregnant woman, collected in the morning, is usually of a pale yellow colour and slightly milky in appearance; it is not coagulable by heat, or by any of the tests which indicate the presence of albumen. Left to itself and exposed to the air after the first day, there begins to appear suspended in it a cottony-looking cloud, and, at the same time, a flocculent whitish matter is deposited at the bottom of the fluid. These phenomena are not of constant occurrence, and moreover healthy urine sometimes exhibits analogous phenomena.

From the second to the sixth day, we perceive small opaque bodies rise from the bottom to the top of the fluid; these gradually collect together so as to form a layer which covers the surface: this is the *kieselstein*. It is of a whitish or opaline colour, and may be very aptly compared to the layer of greasy matter which covers the surface of fat broth, when it has been allowed to cool. Examined by the microscope, it exhibits the appearance of a gelatinous mass, which has no determinate form. Sometimes small cubical crystals can be perceived in it, when it has become stale.

The *kieselstein* continues in the state we have now described, for three or four days; the urine then becomes muddy, and minute opaque bodies detach themselves from the surface and settle at the bottom of the vessel: the pellicle thus becomes soon destroyed.

The characteristic feature, therefore, of the urine during pregnancy consists in the presence of *kieselstein*. It deserves however to be noticed, that the urine, in some cases of extreme phthisis pulmonalis, and also of vesical catarrh, will be found to exhibit on its surface a layer or stratum which is not unlike to that now described as peculiar to the state of pregnancy. But with proper attention we may easily avoid this mistake. The stratum, in the cases alluded to, does not appear so quickly on the surface of the urine as the *kieselstein* does; and also, instead of disappearing, as it is found to do, in the course of a few days, it (the former) goes on increasing in thickness, and ultimately becomes converted into a mass of mouldiness.

Of twenty-five cases, in which M. Tanchou detected the presence of *kieselstein* in the urine, seventeen occurred in women who were pregnant from four to nine months, four in women who had not quickened, and who considered themselves as labouring under disease of the womb, and the remaining four in patients who had been under treatment for casual complaints—one for sciatica at the Hôtel Dieu, another for ascites in the city, a third for an ulcer in the neck at La Pitié, and the last had been cauterized twice a week for a pretended disease of the uterus. In none of these cases had the existence of pregnancy been suspected, although in every one of them the fact was soon placed beyond doubt.—*Med. Chirurg. Rev.*

56. *Duration of Pregnancy.*—Dr. FORSTER, of New York, communicated to the Dublin Obstetrical Society, at their meeting of 7th February, 1839, a case in which the duration of pregnancy was ascertained with accuracy. The patient was the wife of a seaman. Her husband had arrived in Dublin on the 15th of March, 1838, and had left again on the 18th. She was taken in labour on the 26th December, so that the duration of pregnancy was 283 or 285 days. It was a first pregnancy, and the patient had not menstruated since the connection, which took place about a fortnight after the last appearance of the catamenia. There was no reason to suspect deception.

Dr. Nixon mentioned a case he met with about two years ago; it was that of a woman, who, on consulting him with respect to her health, named not only the day, but spoke with confidence of the hour at which her labour would occur. Struck by her apparent conviction that such would be the case, he was led to inquire the grounds of her reasons for thinking so, when she detailed the following particulars:

Her husband, who was a sailor, had been absent for some months; he returned to Dublin on a particular day, and passed that night at home. The following day, while he was assisting in the discharge of the cargo of his vessel, a quarrel ensued between himself and one of the quay porters, whom he struck and killed. The sailor was immediately arrested, thrown into prison, tried and transported. No further intercourse took place between him and his wife, hence she was induced to date the period of her confinement to be nine calendar months from the night of her husband's visit. Dr. Nixon, anxious to learn the result, made subsequent inquiries after the woman, and found that her predictions were very nearly verified, as she took her labour within six hours, and was actually delivered within twelve hours of the period she had foretold.—*Dublin Journal of Medical Science*, July, 1839.

57. *Yellow Liquor Amnii*.—Dr. PURNON, in a paper read before the Dublin Obstetrical Society, mentioned a case, in which, on rupture of the membranes in a woman affected with jaundice, the liquor amnii exhibited a deep yellow colour.—*Dublin Journal*, July, 1839.

58. *Extra Uterine Fecundation*.—A remarkable example of this is recorded by Dr. SPAETH, in the *Medicinisches Correspondenz-Blatt*, in which portions of the fœtus were discharged per anum for twenty years afterwards.—*Gaz. Med. de Paris*, March 23, 1839.

59. *Five Children at a Birth*.—In our number for February, 1838, page 459, an example of this was recorded; and another is said to have occurred at Naples. The mother, who had previously had twelve children at ten accouchements, was taken with labour pains, at the seventh month of utero-gestation, and brought forth successively, and by natural presentations, five living children, all of whom were baptized. The mother did not suffer any thing extraordinary. Four of these children were females, and one male. The male infant was delivered first, and, after a few minutes, one female; then, after a cessation of fifteen minutes' interval between each, the other three followed. The infants much resembled each other, and were of a regular form, and well grown, and very nearly of the ordinary size of a seven months' fœtus; each weighed about three and a half pounds, and measured in length a French foot. The insertion of the umbilical cord was about four lines lower down than ordinarily. The placentas with their membranes were four instead of five; and each had its proper umbilical cord, except the fourth, which contained two in one large sac. The fœtus, with their membranes, placenta, and umbilical cords, are preserved in the Royal Anatomical Museum of the University of Naples.—*B. & F. Med. Rev.*, Oct. 1839, from *Buletino delle Scienze Mediche*, Aug. and Sept. 1838.

60. *Case of Spontaneous Evolution*. By Dr. CARONICO.—The patient was a robust, healthy primipara, ætat. twenty-eight. The membranes had ruptured with the first pains, and an arm prolapsed. No assistance was requested for two days, when two midwives tried to turn, but did not succeed. The pains were violent, and the author was summoned. He found the patient suffering under incessant and painful uterine contractions, without a moment's cessation. The skin was hot, the pulse small and hard, the patient pale and exhausted. The arm (the left) was immensely swollen, livid and black, and the epidermis peeled off. The labia and vagina were much swollen and were beginning to be dry. The author made an attempt to turn, but could not succeed; he therefore bled her, and used narcotics both inwardly and outwardly, by which means the pains in the loins and abdomen abated; she became quiet and fell into a sound sleep which lasted from five to six hours, during which she perspired freely. Slight contractions of the uterus, and almost without pain, now came on; and by their action, the arm and shoulder were detrued still farther, while at the same time the left side of the thorax began to press downwards from the sacrum towards the left arm: the hip followed the side of the trunk, and, as the child

turned completely round, the nates followed, and together with the trunk and legs were now expelled. The head with the arm stretched along it followed without any difficulty, as also did the placenta. The whole process lasted only a few minutes, and the patient assured the author that she had scarcely felt any thing of the pain. The child, which was dead, was full grown: it was emphysematous, the epidermis peeling off, and the limbs quite flaccid. It was to this state of perfect flaccidity, the result of incipient decomposition, that the patient was indebted for the perfect ease with which the whole was accomplished.—*B. & F. Med. Rev.* Oct. 1839, from *Med. Zeit.* Nos. 29-34, 1838.

61. *On the use of the Plug in Placental Presentations.*—Dr. EYONY KENNEDY mentioned at a recent meeting of the Dublin Obstetrical Society, that he had derived much benefit from the use of the plug in restraining the hæmorrhage during the time we are obliged to await the dilatation of the os tincæ, in those cases in which the edge of the placenta is found to overlap it. He explained the dependence of the hæmorrhage, in these cases, upon the separation of the placenta from the neck of the uterus, and the consequent exposure of the vessel at this stage of the labour, and observed that in order to correct this state, he had been in the habit of carefully introducing a piece of sponge *between the head of the child and the placenta*, thus pressing the latter against the neck of the uterus and closing the mouths of the vessels. This he has allowed to remain, and act as it were the part of a compress, until the head descended into the pelvis, the head, in its progress, adding to the compression, and more completely restraining the discharge of blood. He stated that he had by this means, in several cases, completely restrained the hæmorrhage, and the patients had been delivered of living children without the necessity of turning or other interference. He cautioned the society, in case of their having recourse to this method, of the care necessary to take in getting up the sponge, and bringing it against the amnial surface of the placenta, as, if pressed up between the uterus and placenta, it must separate them still further, and consequently increase the hæmorrhage. Dr. Kennedy further observed, that it was not his wish, in mentioning this plan of practice, to lessen the confidence justly placed in turning in placenta presentations, and stated the necessity which exists, after using the plug, for watching the patient closely, and if the circumstances of mother or child require it, having recourse to turning, or the application of the forceps. He then mentioned two cases which had occurred under his observation, in which the placenta separated from the uterus, and descended before the head of the child. In the one there was a total absence from hæmorrhage, in the other a comparatively trifling loss.—*Dublin Journal*, Sept. 1839.

62. *Cæsarian Operation.*—M. HOEBEKE, surgeon at Sottegem in Eastern Flanders, has performed this frightful operation not fewer than *fifteen* times. An account of eight of these will be found in the February number of the *Bulletin Medical Belge* for 1838. The particulars of the present case are these. A woman, 39 years of age, and mother of three children, had for several years been afflicted with rheumatic pains, which had entirely crippled her and rendered her bed-ridden. After trying a variety of remedies, she took for some time whale oil—to the use of which M. Hoebeke attributes the softening and consequent deformity of the bones. When he saw the woman first, she was in the *sixth* month of pregnancy. On examination he found that the *rami* of the pubis and ischium almost touched each other, and that the interval between the tuberosities of the ossa ischii and the coccyx was so abridged that not more than one finger could be passed.

The correctness of these facts is confirmed by the testimony of Professors Verbeek and Lutens; and these gentlemen concurred in the necessity of performing the Cæsarian operation when labour came on. This took place about three months afterwards, and seems to have been performed under every disadvantage, in a miserable hovel, without any accommodation, and with insufficient assistance. When

the uterine parietes had been divided, M. II. found that he was upon the placenta; he detached it somewhat, and by pushing it aside, he felt the bag of the membranes.

On rupturing these, the uterus contracted and pushed out one of the shoulders of the infant; but the operator quickly got hold of the feet and extracted it without difficulty. Another contraction of the uterus now took place, and expelled into the wound two placentas and the feet of another child! Considerable difficulty was experienced in extracting it, in consequence of the head being detained in the inlet of the pelvis: both children were alive. Having removed as many of the clots from the uterus as he could, and of the blood which had been extravasated into the abdomen, the operator proceeded to unite the wound by a few stitches and strips of adhesive plaster. A small portion of lint was introduced between the lips of the wound at its lower extremity. The operation was performed at about two o'clock in the morning. The subsequent recovery of the patient seems to have been wonderfully fortunate. On the second day after the operation, the infants were applied to the breasts, as the milk had begun to flow freely! During the first week there was a copious discharge of a rather offensive serosity from the wound: the process of cicatrisation went on however so favourably, that, by the end of another fortnight, the patient was pronounced cured.—*Medico-Chirurgical Review*, October, 1839.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

63. *On Poisoning with Arsenic; Orfila's Late Discoveries.*—The subject of poisoning by arsenic, which is so important both in forensic and practical medicine, has just been re-examined and thoroughly solved—at least in its medico-legal relations—in some memoirs communicated to the Royal Academy of Medicine.

For this we are indebted to M. Orfila. No one doubts the immense importance of the medico-legal applications of these new researches; but the same cannot be said of their therapeutic value, for this has been contested.

As we are disinterested witnesses of the discussion, and have conscientiously studied all the details of the question, we shall examine it successively under its two aspects. We must observe, however, that in these new inquiries of M. Orfila, the therapeutic question is subordinate to the medico-legal one. We shall, therefore, touch but slightly on the first; but we shall go at length into the method by which arsenic is detected to a *certainly*, in the bodies of those poisoned by it, and which, by the extension of which it is capable, will effect a fortunate revolution in toxicology, by ensuring the discovery of the greater number of poisons in the bodies of their victims; and this at every period of their crime, however advanced decomposition may have been, and in whatever manner the poison may have entered the living organs. Such, by anticipation, is the general enunciation of the results of these inquiries.

Hitherto, medico-legal examination in cases of poisoning has consisted chiefly in analyzing the matters found in the stomach and intestines after death. Investigation was not pushed any farther.

But it often happens, however little the judicial inquiry may have been delayed, particularly when the dose of the poison has not been very large, that the most careful analysis does not detect the slightest trace of any poisonous substance, although poisoning has really taken place. This is particularly the case with arsenic, the special object of the late investigations, and must be so also with a great number of other poisons.

The cause of the failure is obvious enough; the poison has been removed by absorption from the alimentary canal. Whether the arsenic is swallowed, or applied to any other part of the system, the explanation is the same; unless the dose is very large, it disappears sooner or later, being carried by the absorbents into the depths of the system. This being granted, it is plain that if we confine